

TO: Dr. Kecia Ray, Associate Superintendent for Federal Programs
Mr. John Williams, Chief Information Officer
Dr. Gregory Patterson, Associate Superintendent for Elementary Schools
Sandra Tinnon, Associate Superintendent for Middle Schools
Jay Steele, Associate Superintendent for High Schools

FROM: Hillsboro Cluster Technology Group

Re: Technology in the Hillsboro Cluster schools

DATE: January 5, 2010

Dear Committee Members,

Thank you for providing an opportunity for representatives from the Hillsboro cluster group to discuss technology issues that confront our cluster schools. Our journey began a few months ago with a single question: How can we improve the use of technology for instructional purposes across all schools in the Hillsboro cluster? Since then, we have gathered data regarding a range of issues such as infrastructure (i.e., hardware, wireless connection), technical support, professional development for faculty and staff, and the ability of our cluster to conduct long range planning regarding technology given sparse funding.

In summary, our findings are as follows:

- Great discrepancies exist across the cluster schools as to the infrastructure and use of technology.
- Because there are no official standards for technology, technology goals for students are not systematic and teachers are left to use technology or not depending on their resources.
- Related to the above finding, there is lack of clarity about what technology skills students should have mastered as they transition to other cluster schools (i.e., 5th and 9th grades).
- Lack of professional development opportunities exist for faculty and staff to learn how to embed technology in instruction.

This report summarizes the results from our research and poses questions for this committee to advocate for support for technology in the Hillsboro cluster schools. Thank you for this opportunity to communicate with you.

Sincerely yours,

Kristen W. Neal, Ph.D.
Percy Priest Elem Representative
krisneal@comcast.net

Leslie Hudson
Percy Priest Elementary Technology Committee
bethrandal@comcast.net

Attachments: report summary

cc: Mr. David Fox, School Board Representative, Hillsboro Cluster

Technology Inventory within the Hillsboro Cluster

Percy Priest Elementary

Library with 15 stations
2005 Dell mobile laptop cart (to be retired in 2010)
Response pad system (also known as clickers, 1)
Teacher laptops (all)
Elmo cameras (all)
Classroom projectors (all)

*Julia Green Elementary

Fixed lab with 17 stations
Mobile lab with 12 laptops
LCD projectors (all classrooms)
Teacher laptops (3)
Classroom computers (limited)
*PTO may have added recent classroom computers.

JT Moore Middle School

Fixed lab with 30 stations
Library with 28 stations
Classroom computers (47)
Classroom projectors (8 mounted, 2 other)
Laptops (8 deployed to rooms with projectors, 3 other)
Elmo cameras (2)
Response pad system (3)
Chalkboard slates (6)
Flat panel display in lobby with video card
TV studio with ancient Mac and switcher
Music recording equipment (donated by music industry)
3-hub wireless setup reaching approx. 3 rooms

Hillsboro High School

Fixed lab (2)
Mobile lab (1)
LCD projectors (all classrooms)
Smartboards (12-15)
Wireless hubs (paid for by HHS)

Glendale Spanish Immersion Elementary

Teacher laptops (all)
Projectors
Fixed lab (bldg was already wired)
Elmo cameras (10+)

West End IB Middle School

Dell desktop computers (132)
Dell laptops (8)
15 projectors (7 mounted)
CPS-IR-24 response units (2)
CPS-IR-32 response units (2)
SmartBoards (5)
Elmo camera (1)
CB-06-01V slates (6)

A Look at Other Schools

- Williamson County

The second grade report card has a "Media Component" under "Literacy" where students are assessed each quarter on ability to "utilize technology to publish and present writing."

Students also are marked on their ability to "use technology efficiently" as defined in Grade 2 standards. The county publishes a statement on keyboarding skills: "Achieving keyboarding proficiency at an earlier age is necessary for the successful integration of technology across the curriculum..."

- Great Neck, NY

Standards are posted online along with a thoughtful mission statement, which reads in part: "Our philosophy is to view technology as educational tools to be used creatively, responsibly, and collaboratively for teaching and learning in order to solve problems and to access, analyze, present and communicate information."

- Long Beach Island, NJ

This district gives another example of a detailed technology vision statement: "Technology experiences will enable students to gather, evaluate, and share information locally as well as globally."

There also is a list of what tasks staff should be able to achieve with a computer.

- Ensworth (private school, Nashville TN)

Specific computer classes are given in grades pre-1st through 4th where students complete assignments that are skills-based and that are integrated into the core curriculum. Starting in 5th grade computer classes stop because technology is fully integrated into the core curriculum. Teachers are then responsible for incorporating technology into their lessons.

Dedicated staff includes a department chair, a tech integration specialist, a 6th grade teacher, an IT director and a support tech for pre-1st through 8th.

Questions and Issues

- What is the vision regarding the use of technology for all MNPS schools? How is this vision communicated?
- When can MNPS provide a stable technology budget for all schools?
- How can funding be prioritized for non-Title I schools that have limited sources of funding for technology?
- How many students/computers are supported by each MNPS IT technician? Can this be improved?
- What percentage of MNPS IT service calls would be eliminated if all PCs were 4-yr-old or less and were automatically imaged to a common standard configuration?
- How and when will International Society for Technology Education (ISTE) standards be incorporated into MNPS standards? How will this be communicated to faculty and parents?
- Will the embedded standards include a "what to buy" list for principals/schools?

Most Pressing Needs in Hillsboro Cluster

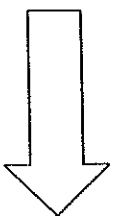
- Access to technology (more computers for students and staff)
- Laptops for all teachers in all schools
- Wireless connection throughout schools available for student use
- Professional development for faculty and staff on strategies to embed technology in instruction (including compensation for time to learn about technology from colleagues after school and during summer)
- Other hardware needs
 - Mounted classroom projectors
 - Elmo cameras
 - Student response systems
 - Notebook carts
- Monitoring and evaluation of use of technology to enhance instruction

Goals/Proposals

- Adopt the International Society for Technology Education (<http://www.iste.org>) standards and provide professional development system-wide as to their use for instruction.
- Establish specific curriculum standards that address transition grades: 4th to 5th and 8th to 9th.
- In collaboration with Hillsboro High School cluster principals and their designees, develop a plan to bridge the gap for students who lack basic technological literacy (i.e. keyboarding skills, an understanding of simple word processing and how to save documents). Require problem solving and innovation that uses embedded technology.
- Move toward "intelligent" classrooms and provide extensive professional development for faculty and staff to use the technologies in instructional ways.
- Locate funds immediately available for stop-gap response to high-priority tech issues.
- Locate funds that schools can incorporate into long-term strategic plans to meet technology needs.

Technology Use in the Hillsboro Cluster

Basic keyboarding skills
Basic word Processing skills
Use of the Internet for research
Basic use of classroom technologies
(i.e., Elmo cameras, Smartboards, etc..)



Creativity and Innovation
Communication and Collaboration
Research and Information Fluency
Critical Thinking, Problem Solving and Decision-Making
Digital Citizenship
Technology Operations and Concepts
(ISTE Standards for Students, www.iste.org)